STATEMENT OF SCOPE

Department of Natural Resources

Rule No.: DG-31-20

Relating to: Revisions to ch. NR 809 related to the promulgation of new drinking water maximum contaminant levels for 12 additional Per- and Polyfluoroalkyl Substances (PFAS) and combined standards for 4 PFAS.

Rule Type: Permanent

1. Finding/nature of emergency (Emergency Rule only):

The rules will be proposed as permanent rules.

2. Detailed description of the objective of the proposed rule:

The objective of the proposed rule is to amend ch. NR 809, Wis. Adm. Code, to establish drinking water standards, referred to as Maximum Contaminant Levels (MCLs), for 12 Per- and Polyfluoroalkyl substances (PFAS) and combined standards for 4 PFAS. Establishment of these MCLs is based on recommendations for health-based standards from the Department of Health Services (DHS) based on its review of scientifically valid technical information. On November 6, 2020, DHS transmitted the 11th Cycle of Groundwater Standards Proposals to DNR containing recommendations to establish groundwater standards for 22 substances including individual standards for 6 pesticides, individual standards for 12 per- and polyfluoroalkyl substances (PFAS), and combined standards for 4 PFAS.

PFAS contaminants have been identified as emerging contaminants by the EPA and numerous states, including Wisconsin, due to their persistence in and threats to the environment, including surface water and groundwater resources. The impacts to surface water and groundwater sources are threats to public health, welfare and safety in obtaining drinking water. Establishing drinking water standards for certain PFAS contaminants in this rule will protect public health by setting MCLs that may not be exceeded. If MCLs are exceeded, a corrective action plan must be implemented to maintain protection of public health, welfare and safety in drinking water.

Because of sampling conducted pursuant to the EPA's Unregulated Contaminant Monitoring Rule 3 (UCMR 3), the PFAS contaminants Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) were identified in the drinking water at several Wisconsin public water systems. Subsequent environmental investigations throughout the state have identified several PFAS contaminant sources with impacts to the environment including the waters of the state. Additional drinking water monitoring of PFAS contaminants at several

Wisconsin public water supply systems since completion of UCMR 3 has identified additional PFAS impacts to several drinking water sources.

Adverse health effects have been associated with exposure to PFAS compounds based on several studies. Adverse health effects include an increase in cholesterol, liver damage, thyroid disease and a decrease in fertility and birth weight. The EPA and international studies have classified some PFAS as possibly carcinogenic to humans.

3. Description of the existing policies relevant to the rule, new policies proposed to be included in the rule, and an analysis of policy alternatives:

Chapter NR 809, Wis. Adm. Code, promulgated consistent with the Safe Drinking Water Act, contains drinking water standards (MCLs) for more than 90 regulated contaminants. The rule amendment to add 12 PFAS contaminants and combined standards for 4 PFAS to ch. NR 809, Wis. Adm. Code, is consistent with the existing policy in ch. NR 809, Wis. Adm. Code, to establish MCLs to provide minimum standards for the protection of public health, safety and welfare in the obtaining of safe drinking water. The amendment of ch. NR 809, Wis. Adm. Code, is the most efficient and effective policy alternative to add certain PFAS contaminants as regulated contaminants for the protection of public health, safety and welfare.

A policy alternative would be to wait until EPA promulgates MCLs for PFAS substances. It is unclear if or when EPA will do this, how many years it would take and for which PFAS compounds EPA would develop MCLs. WI DNR would have to promulgate PFAS MCLs for those compounds in ch. NR 809 in order to maintain primacy.

4. Detailed explanation of statutory authority for the rule (including the statutory citation and language):

Under s. 281.17(8)(a), Wis. Stats., "the department may establish, administer and maintain a safe drinking water program no less stringent than the requirements of the safe drinking water act, 42 USC 300f to 300j-26." Establishment of drinking water MCLs to add 12 PFAS contaminants and combined standards for 4 PFAS, is consistent with the objectives of the EPA's Safe Drinking Water Act (Title 40, Chapter 1 Subchapter D Part 141 National Primary Drinking Water Regulations) and ch. NR 809, Wis. Adm. Code. The purpose of ch. NR 809 is to establish minimum standards and procedures for the protection of public health, safety and welfare in obtaining safe drinking water.

Ch. NR 809, Wis. Adm. Code, is adopted under authority granted in chs. 280 and 281, Wis. Stats. Related statutory authority includes:

Section 280.11(1), Wis. Stats., Pure drinking water. Provides department authority, after a public hearing, to prescribe, publish and enforce minimum reasonable standards and rules and regulations for methods to be pursued in the obtaining of pure drinking water for human consumption and the establishing of all safeguards deemed necessary in protecting the public health against the hazards of polluted sources of impure water supplies intended or used for human consumption. The department has general supervision and control of all methods of

obtaining groundwater for human consumption including sanitary conditions and generally to prescribe, amend, modify or repeal any rule or regulation theretofore prescribed and shall do and perform any act deemed necessary for the safeguarding of public health.

Section 281.12, Wis. Stats., provides that the department has general supervision and control over the waters of the state and is to carry out the planning, management and regulatory programs necessary for implementing the policy and purpose of ch. 281, Wis. Stats., including to protect, maintain and improve water quality. The department also shall formulate plans and programs for the prevention and abatement of water pollution and for the maintenance and improvement of water quality.

5. Estimate of amount of time that state employees will spend developing the rule and of other resources necessary to develop the rule:

The department estimates that approximately 925 hours of staff time will be required to complete the proposed rule.

6. List with description of all entities that may be affected by the proposed rule:

The proposed rule will affect the following entities:

- Municipal community water systems (cities, townships, sanitary districts)
- Other-than-municipal community water systems (mobile home parks, apartment buildings, condominium associations)
- Non-transient Non-community water systems (small businesses with 25 or more employees that are not on a municipal source)
- Laboratories certified to perform PFAS analysis in drinking water
- Wisconsin Department of Natural Resources
- Wisconsin Department of Health Services
- Wisconsin Department of Safety and Professional Services
- Treatment installation businesses

7. Summary and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the proposed rule:

The process for the proposed amendment to ch. NR 809, Wis. Adm. Code, to establish certain MCLs for PFAS contaminants is consistent with the process for establishing rules for other drinking water contaminants regulated under the federal EPA Safe Drinking Water Act, specifically Title 40 - Protection of the Environment; Chapter 1 - Environmental Protection Agency; Subchapter D - Water Programs. The department has a primacy agreement with the EPA to implement the Safe Drinking Water Act.

As a result of findings from EPA's UCMR 3 national monitoring of public water supply systems, the EPA issued a Health Advisory Level (HAL) for two PFAS contaminants, PFOA and PFOS,

in 2016. A HAL of 70 parts per trillion (ppt) for PFOA and PFOS, individually or combined, were established based upon laboratory animal and epidemiological human studies indicating adverse health effects related to PFOA and PFOS exposure. These studies were conducted prior to 2016; more recent human health studies are available. Adverse health effects included developmental effects of fetuses during pregnancy or to breastfed infants, cancer, liver effects, immune effects and thyroid effects and other health effects. During EPA's UCMR 3 national monitoring of public water supply systems, additional PFAS were also monitored as emerging contaminants including perfluorobutanesulfonic acid (PFBS), perfluorohexanesulfonic acid (PFHxS), and perfluorononanoic acid (PFNA). Additional PFAS emerging contaminants continue to be evaluated by the EPA for adverse health effects in humans similar to PFOA and PFOS. In 2018, the Agency for Toxic Substances and Disease Registry, a branch of the Center for Disease Control and Prevention, issued a draft report based on more recent PFAS human health studies. In that draft report, the proposed ATSDR "minimum risk levels" or MRLs, translate roughly to 7 ppt for PFOS and 11 ppt for PFOA.

In February 2019, the EPA released a Per- and Polyfluoroalkyl Substances (PFAS) Action Plan. One of the four primary actions in the PFAS Action Plan is initiating steps to evaluate the need for MCLs as part of the Safe Drinking Water Act. The EPA PFAS Action Plan proposes to characterize potential health impacts from a broader set of PFAS. The EPA is working on or has begun toxicity work on a number of PFAS emerging contaminants including GenX chemicals and PFBS in addition to PFBA, PFHxA, PFHxS, PFDA, and PFNA.

In February 2020, EPA announced that it is proposing to regulate both PFOA and PFOS under the Safe Drinking Water Act. This preliminary determination is a step toward providing state and local communities with key information about PFOA and PFOS in drinking water. In the proposal, EPA is also asking for information and data on other PFAS substances, as well as seeking comment on potential monitoring requirements and regulatory approaches EPA is considering for PFAS chemicals. If the positive regulatory determination is finalized, the agency would begin the process to establish a national primary drinking water regulation for PFOA and PFOS, which could take 3 to 5 years.

8. Anticipated economic impact of implementing the rule (note if the rule is likely to have an economic impact on small businesses):

We anticipate the economic impact of this rule to stakeholders including small businesses to be significant, and will be greater than $10 million in any two-year period. In the absence of adequate testing data for these PFAS contaminants, the department cannot predict the number of systems that will have to spend money to mitigate these contaminants at this time. The department may have more information in preparation for the required Economic Impact Analysis later in the rule making process.

Testing will be required at a frequency similar to other synthetic organic compounds having Safe Drinking Water Act MCLs. This testing would occur at least every six years, but may be as often as every quarter for a small subset of public water systems, depending upon the levels of PFAS contaminants detected. This will affect approximately 2,000 public water systems. Currently the cost of this analysis is $375 per sample.

The number of systems needing to treat their water or drill a new well due to an attainment or exceedance of one or more of the PFAS MCLs is unknown at this time. Some communities may have detections of any one or more PFAS MCLs, but not attain or exceed one of the PFAS MCLs. When needed, the cost of treatment at a large municipal public water system could be at least $25 million; however that figure could be much lower at smaller systems. Some systems may also choose to drill a new well if it is possible to find an uncontaminated aquifer. Others may elect to take a well off line if sufficient capacity is available based on the other wells in the system. Where there is a known entity responsible for the contamination, the state would request that the responsible party pay for the costs of responding to the contaminated well. The typical cost of a well at a non-transient non-community system is approximately $11,000.

The economic benefits of avoiding negative human health effects may greatly outweigh the costs of treating the water or drilling a new well. The department is still assessing the extent of the economic impact of the rule, but it is projected to be significant in the first few years of implementation and more moderate in later years once initial up-front treatment installation costs are covered.

9. Anticipated number, month and locations of public hearings:

The department anticipates holding 5 public hearings in September 2022. Hearings will be held simultaneously by videoconference. Anticipated hearing locations are Madison, Rhinelander, Superior, Marinette, and La Crosse.

The department will hold these hearings to gather stakeholder input on a rule package that is used widely statewide.

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For Preston D. Cole, Secretary

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